

Saint Paul Public Works Department 2008 Annual Report





















A Message from the Director:

66 What a difference a year makes. At the end of 2007 we were thinking about a collapsed bridge in Minneapolis, new stock market highs and skyrocketing fuel prices. Since then the bridge is back up, but fuel prices have fallen from the sky as has the economy and the stock market.

Fortunately some things remain constant, like Saint Paul Public Works commitment to excellence. What follows are just a few of our significant accomplishments in 2008:

- Completed residential street paving projects at
 - Ivy Kennard;
 - Seventh Bay; and
 - Griggs Jefferson;
- Continued rehabilitation of the City's sewers using trenchless technology;
- Successfully assisted law enforcement with many tasks during the Republican National Convention;
- Completed Phase II of the Rondo/Saint Peter storm sewer tunnel repair project;
- Participated in two very innovative public art projects with Public Art Saint Paul
 - The very popular "Everyday Poems for City Sidewalk" project; and
 - A very unusual approach to traffic calming with special signs called "The Art of Traffic Calming;"
- Tested various types of energy efficient street lighting products and installed nearly 30 induction street lights as a larger pilot; and
- Retrofitted two buildings at our Dale Street campus to improve energy efficiency with projects having an overall payback of 2.25 years.
- Received the American Public Works Association's award for Technical Innovation for the city's use of CodeRED, a citywide calling system for announcing snow emergencies.

Exciting things that will be happening during 2009 include:

- Continuing to compare our work to best practices through the American Public Works Association process;
- Purchase and implementation of a pavement management system;
- Continued work on installation of audible pedestrian signals in our transit corridors; and
- Completion of two major Ramsey County bridge projects in the North End Maryland at 35E and Rice Street over the Burlington Northern Railway at Ivy.

When we reflect one year from now many of our current troubles will be a distant memory. It is entirely likely that new concerns will replace them. Through it all, rest assured that the great people of Saint Paul Public Works will maintain their focus and will be working on those enduring things that provide the foundation for quality urban living.

Director Bruce Beese with APWA's 2008 Technical Innovation Award

Bune & Beere

Mission Statement

To preserve and enhance infrastructure to ensure a safe and livable Capitol City for all.

Vision Statement

To be a recognized leader in providing public works services through: Responsive Services, Quality Facilities and Employee Pride.

Operating Principles

Within each of the visionary phrases above, we see much more. Responsive services includes a workforce that strives to always be effective at what we do and efficient in carrying those services out. Quality facilities does not just mean infrastructure that provides our customers trouble-free service but that we are committed to public and personal safety, and that our infrastructure design and maintenance will be progressive and forward thinking. Employee pride shall always mean that we are an organization made up of individuals that place the utmost value on their work product, who are of the highest integrity and who take pride in the diversity of our City and our workplace.

Customer Service Statement

Public Works' employees are dedicated to providing our customers professional, courteous and efficient service in a timely and respectful manner.

Stakeholders

The Saint Paul Public Works Department through its many services touches everyone that lives in, travels through or works in Saint Paul. This means that residents, business people and visitors benefit from the quality services we provide. Residents are provided excellent services at an affordable price; businesses benefit from the efficient transportation of their goods and services throughout the city or onward throughout the metropolitan region; and our visitors have their experience enhanced by trouble free travel to their destination.

Often, elected officials, bargaining unit partners, other city departments, partner organizations and the media are stakeholders in the work that we do or the information that we need to share.





Sidewalk panel with poetry

A reach for a name, a song, a tune, and memories scatter, minrows fleeing a toothy pike.

I catch a few laggards.

But know these are nothing to the hundred fish that fled.

Example of stamped poem



Streetlight

Two highlighted 2008 projects.

Everyday Poetry for City Sidewalk

Je ne sais quoi - a French phrase that literally translates to "I know not what," meaning a quality that eludes description. What is it about Saint Paul that we love? What is that quality that eludes our description yet keeps us living, working and playing here? Public Works partnered with Public Art Saint Paul in 2008 to add definition to that elusive quality through the unique "Everyday Poems for City Sidewalk" project. This project collected twenty original works of poetry from Saint Paul through a competitive process and then stamped them into many of the freshly poured sidewalk panels that were replaced as part of our summer sidewalk maintenance program.

The public reaction to the project was fantastic. Residents and visitors alike have expressed their delight and satisfaction at seeing the new and different works punctuating their walks around the City. In our own small way, we are helping to build on the literary foundations laid by great writers that have gone before like August Wilson, F. Scott Fitzgerald and Sinclair Lewis. These artists left their written mark on the history of Saint Paul, and now we have too!

Alternative Lighting

Earth Hour is a growing worldwide event intended to make a statement about our use of energy, primarily through the way we light our world. Wouldn't it be great if we could say we celebrate Earth Hour every hour?

Saint Paul Public Works is working hard to make that dream a reality. The funny thing is, if we succeed, you may never know. Streets, bridges and parks will still be invitingly lit as before. So what are we doing? We are testing new technologies that are being developed to reduce the amount of energy consumed on the street. Among these new technologies is LED or light emitting diode technology. LED lighting is not new to us by any stretch. We began using LED lighting in 1996 by replacing all of our red traffic signal indications with LEDs. Greens and some of the yellows followed. Now we are seeking to employ that technology for street lighting. We have tested several types of LED lights over the past year, and have used "induction" lighting in other applications. We installed a larger scale test of 29 induction lights in the Ashland-Pascal Residential Street Vitality Program (RSVP) project last year. These lighting systems replace high pressure sodium lamps that already use one-half of the energy consumed by a standard incandescent bulb. LED and induction technology cut that energy consumption in half again, using only one-quarter of the energy consumed by an incandescent. Our Traffic Division staff has done fantastic work to make our vision for a lower energy future a reality. The future is here, and Public Works is lighting the way!





Administration

Manager: Bruce Beese Staff: 22



Bridges

Manager: Kevin Nelson, PE Staff: 23

Administration

2008 Achievements:

- Retained S & P AAA rating for sewer bonds
- Retained Moody's Aa2 rating for sewer bonds
- Co-authored new traffic meter cash policy with Traffic Operations

2009 Division Outlook:

Administration will begin work on adopting 17 of APWA's "best practices" concluding this work in 2010. Payroll staff will continue its work in updating the City's payroll manual; the last update took place in 2001.

Work on the city's Enterprise Resource Planning (ERP) system is already underway in what will be a years-long review and application process. The ERP is envisioned as a system that will integrate multiple city functions (budgeting, accounting, payroll, human resources etc...) into a central data base manager. The ERP is but one feature of a larger city planning process called City Operations Modernization and Enterprise Transformation or COMET.

A comprehensive rate and financing study of the Right-of-Way Maintenance Fund will take place in early 2009. The goal is to assist policy makers with the fund's finances and improve our maintenance of our streets.

Bridges

2008 Achievements:

- Restored and painted 1,500 feet of ornamental railings on Kellogg Blvd
- Completed \$1.2 million construction of Como Park Bikeway Bridge
- Undertook preliminary design of new Channel Street/Wabasha Street stair tower (estimated \$1.5 to 2.5 million)
- Safely removed the Green Stairs, a West Side landmark following rock slide damage in the Spring
- Persuaded MnDOT to add a pedestrian/bike path on the plans to replace the Lafayette Bridge

2009 Outlook:

Construction will begin on the rehabilitation of two structurally deficient bridges on Maryland Avenue between Jackson and I-35E. Both of these bridges have sufficiency ratings of less than 50 on a 1-100 scale. Estimated cost of the project: \$1.9 million.

Another structurally deficient bridge on Rice Street north of Maryland will be rehabilitated at a cost of \$2.5 million.





Municipal Equipment

Manager: Ron Mundahl Staff: 23

Municipal Equipment

2008 Achievements:

- Added three "clean" idling diesel-powered heavy trucks to the fleet
- Retrofitted 15 diesel trucks with diesel oxidation catalysts for cleaner operation
- Expanded LED emergency lighting on our vehicles
- Sold over 150 items at annual equipment auction



Vehicles awaiting auction at the Dale Street facility

2009 Outlook:

Plans are moving ahead to complete a shop lighting upgrade for the Municipal Equipment Garage. The project cost is estimated between \$55,000 and \$65,000 with a payback projected at three and a half years. This project will cast a long shadow on our operations budgets while reducing our carbon footprint.

Research on alternative fuels will continue in 2009, as will our effort to provide better equipment for our customers. In turn, such research will allow our customers to provide improved service to the public.

During 2009 we will continue to work with (and try to expand on) governmental agencies from the metropolitan area in attempts to work cooperatively in order to minimize costs and maximize our limited resources.





Sewer Division

Manager: Bruce Elder, PE Staff: 68 We will also research the possibility of securing Federal Stimulus funding to purchase alternative fuel vehicles or hybrid vehicles which fit our fleet replacement needs and equipment requirements.

The annual surplus equipment auction will again be scheduled for late September of 2009. These auctions have always been an excellent way to dispose of vehicles and equipment which are no longer usable to the City of Saint Paul. Auction participants include; the Fire Department, Police Department, Parks, the Water Utility, ISD 625 and Public Works.

Sewer Division:

2008 Accomplishments:

- Invested \$6.5 million in sewer rehabilitation using trenchless technology
- Completed Phase II of St. Peter Rondo tunnel repairs
- Inspected 80 miles of sewers
- Inspected, cleaned, and secured sewers at and around the Xcel Center for the RNC



Hand in History manhole cover installed & secured within security perimeter during RNC. At the corner of Washington & 5th Street

2009 Outlook:

In the coming year our maintenance section will be cleaning all of the catch basins that drain to Como Lake. In 2010, we'll then turn our attention to the catch basins that drain into Lake Phalen. In 2009 we will be updating our sewer records and checking them for accuracy.



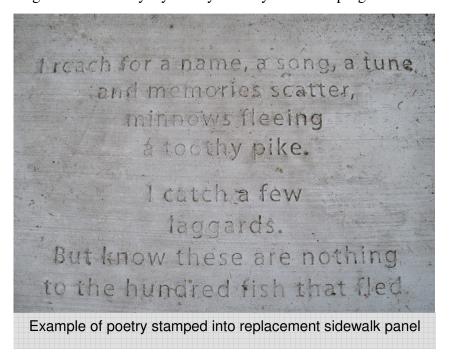


Street Engineering

Manager: Dan Haak, PE Staff: 35 Street Engineering Division 2008 Accomplishments:

- Completed Residential Street Vitality Program (RSVP) projects:
 Ivy Kennard,
- Seventh Bay, and
- Griggs Jefferson

Modified sealcoating program to reduce neighborhood disruption Inaugurated the Everyday Poetry for City Sidewalk program



Outlook for 2009:

For 2009, we would like to expand on the popular Everyday Poetry for City Sidewalk project, and will complete the Earl-McLean and Ashland-Pascal RSVP projects. Other Street projects looking to be completed this year include:

- Victoria Street,
- East 6th Street and:
- Payne Avenue Phase I.

Data will be gathered and entered into the new pavement management program.





Street Maintenance

Manager: Gary Erichson, PE Staff: 136

Street Maintenance Division

2008 Accomplishments:

- Completed energy retrofit in the Sanitation Garage
- Reduced citywide sealcoat program routes from once every eight years to once every ten years
- Reduced arterial sweeping cycle from 16 times per season to ten times per season



Outlook for 2009:

- Continue Arterial Street Sweeping at 10 times per season.
- Reduce Salt usage on residential streets to intersections only, except where icing is a problem hills and seasonal springs, etc.
- Begin data collection and condition rating of pavements for Pavement Management System.
- Began policy of plowing arterial streets before salt application.
- Continued reduction in workers compensation spending
- Complete Right-of-Way Maintenance Fund financial study.





Technical Services

Manager: Paul Kurtz, PE Staff: 23



Traffic & Lighting

Manager: Paul St. Martin, PE Staff:78

Technical Services Division

2008 Accomplishments

The Real Estate section has transferred its operations to the Office of Financial Services leaving the following sections within Public Works: Maps & Records

Information Systems, Computer Support & Infrastructure Management Capital Planning & Programming

Engineering Fund Management

- Special Projects (APWA Management "Best Practices")
- Earned LEED Gold certification
- Retrofitted seven city-owned building for better energy conservation
- Updated street level photography for city-wide GIS data base

Projects slated for 2009 include:

Organizing and training a "Core Team II" to maintain staff support and backup for our computerized maintenance management system (CMMS) Managing the Capital Improvement Budget process for Public Works; this process will establish the department's capital improvement projects for 2010 and 2011

Updating the City Map for 2009

Progress toward completing the evaluation of the Best Practices.

Traffic and Lighting

2008 Accomplishments

Initiated "The Art of Traffic Calming Signs" traffic calming project Undertook testing of LED street lights for improved energy & maintenance savings

Began adding accessible pedestrian signals in transit corridors

Budget

The Traffic Division 240 Fund lost over \$1.4 million in 2007. In 2008, a combination of staff reductions, service reductions, efficiency improvements, taking on additional construction projects and some additional maintenance revenue resulted in ending near a break even point in 2008.

Traffic Signal Construction by City Forces

We took on additional work to help with budget issues. Projects completed:

- Shepard/Gannon Reconstruction
- Cretin/Grand Reconstruction substantially funded by St. Thomas
- 70th/Hardwood Signal Installation in Washington County
- Randolph/Lexington Revisions funded by Trader Joe's development





Traffic & Lighting

Street Lighting Construction by City Forces

We took on additional work to help with budget issues. Projects completed:

- Second Phase of Jefferson Griggs RSVP
- Ivy/Kennard RSVP
- First Phase of Earl/McLean RSVP
- Ashland/Portland RSVP
- Winifred Street Lighting
- Small Downtown Projects

Energy Efficient Street Light Testing

Installed and tested six 187 Watt LED Cobra head style lights on Maryland between Earl and east of Frank to replace 250 Watt HPS. Lights removed due to unacceptable light levels.

Installed four 48 Watt LED retrofit lamps in lantern style street lights on Iowa from Chatsworth to Milton. They replace a 70 Watt HPS fixture.

We installed three 23 Watt induction lamps in a three-globe ornamental lighting fixture on the north side of Fourth Street between Washington and Market. The 23 Watt induction lamps replaced 50 Watt high pressure sodium lamps.

We installed four 40 Watt induction lamps on Iowa Avenue between Milton & Victoria in our city standard Arlington Style Lantern Street Lights. They replace the 70 Watt HPS lamps.

We installed 40W Induction Lamps in 29 Ornamental Street Light Poles which were installed in the Ashland/Portland Residential Street Paving Project. These will replace our current standard of 70W HPS lamps. We have received some negative feed back from residents on illumination levels and quality of light. Survey was sent to residents.

Non-Motorized Transportation Program

Application for \$250,000 of federal funding from Transit for Livable Communities administered Non-Motorized Transportation Pilot (NTP) Program for Highland Parkway/Edgcumbe Boulevard Bike Boulevard was funded. We started community process on this project. Many in community are opposed to project.

Progress was made on federal process, design and community participation on the Marshall – Mississippi River to Cretin (\$626,300 of Federal Funds) and the Como-W City Limits to Raymond (\$418,800 of Federal Funds) NTP projects which were funded in 2007. We applied for additional projects in late 2008.





Traffic & Lighting

Art of Traffic Calming Signs

Traffic Division manufactured and installed 37 "Art of Traffic Calming" signs. We worked with Steven

Woodward, the City's former Artist in Residence, on the design and locations.

First installation was completed on Hamline Avenue from Charles to Blair and Thomas Avenue from Pascal to Griggs. Second installation was on George Street between Humboldt and Ohio. Signs will be moved to another location in Spring 2009. Speed studies were also completed in conjunction with sign installation.







Examples of Traffic Calming Art Signs at Hamline and Thomas

Accessible Pedestrian Signals

We received \$100,000 of Federal New Freedom Funding in 2007 for the installation of Accessible Pedestrian Signals in transit corridors. In 2008, we identified locations for installation, executed grant agreement, secured funding from MnDOT and Ramsey County for their share of project, and made progress on purchase of equipment. We also applied in 2008 for additional funding.

Police Department Security Camera Project

Traffic staff is coordinated with Police Department on the installation of security cameras on University Avenue and in downtown area.

Republican National Convention

Traffic Division was heavily involved in various activities related to RNC.

Central Corridor Light Rail Transit

Traffic Division was heavily involved in various activities related to CCLRT.

Federal Transportation Funding

Two projects submitted for 2011/2012 Federal Transportation Funding were funded. Raymond Avenue Traffic Calming from University to Hampden





Traffic & Lighting

(\$960,000 Federal Funding) and Traffic Signal Fiber Communication/Signal Timing Improvements along Seventh Street, Snelling and Ford Parkway (\$1,340,000 Federal Funding).

Safe Routes to Schools

One of our two applications for MnDOT administered Federal Safe Routes to School Funding was approved. The non infrastructure project which was funded is focused on changing residents, parents, and teacher's attitudes and actions related to traffic safety in and around area schools. The project has three key elements; a school evaluation planning component, a Risk Watch safety curriculum and fun night, and a Neighborhood Yard Sign program. We received \$50,000 of federal funding for the project.

MnDOT Cooperative Agreement Funds

Two projects submitted for 2009 MnDOT Cooperative Agreement Funding, reconstruction of traffic signal at Minnehaha/East Seventh/ Mendota intersection and installation of new traffic signal at Shepard/I-35E On Ramp intersection were funded. We submitted for 2010 funding for Selby/Snelling and Robert/Cesar Chavez signal reconstruction.

Parking Meters

The City of Minneapolis is in the RFP process for "High Tech" parking meters. Meters would be more customer friendly, have more reporting capability, flexibility and potentially increase revenues. Traffic Division staff assisted Minneapolis in evaluating the vendors and will be involved on monitoring of the testing. Minneapolis has selected 6 vendors for installation of test meters over this winter. Minneapolis would then select a vendor in summer 2009 and begin implementation citywide. The intent would be that St. Paul/Minneapolis enter into joint contract with vendor(s) which would reduce purchase/implementation costs. This model was used when our existing meters where purchased 12 years ago. We will have to identify funding source to implement if we decide to proceed.

Traffic Calming/Pedestrian Safety Projects

- Installed pedestrian refuge median island construction completed at the Charles/Fairview intersection.
- Installed Traffic Circle at Charles/Albert & Portland/Albert intersections
- Paint the Pavement installed at Aurora/St. Albans intersection
- Converted Payne Avenue from East Seventh to Edgerton to 3 lane section in conjunction with mill and overlay project.

